7400 Stereo Receiver

Date of manufacture : ? - Nov 89

Please note that this document contains the text from the original product brochure, and some technical statements may now be out of date

The 7400 Receiver (composed of circuitry from the 2400 Power Amp and 1700 Preamplifier/Tuner) was designed according to the same principles as the 7l00, but it is approximately twice as powerful and has additional refinements, including semi-parametric tone controls and convenient analogue style knob tuning.

While the 7400 is conservatively rated at 100 watts per channel continuous power for test tones, its Power Envelope circuit produces upwards of 370 watts per channel of long-term dynamic power for music, with a peak current of 40 amperes for precise control of voice-coil motion with speaker impedances as low as 2 ohms. For still more power, a rear-panel bridging switch converts the output stage into a mono amplifier rated at 200 watts continuous power and 800 watts of tone-burst power for music, The companion 2400 Power Amplifier may be added for stereo.

Semi-parametric tone controls combine the the simplicity of ordinary bass and treble controls with the flexibility of a two-band parametric equaliser. Bass EQ) strengthens the deep bass while infrasonic filtering prevents muddy intermodulation distortion. Ultra-quiet line-level circuits, including a feedback-operated volume control that reduces noise as its gain is lowered, provide a signal/noise ratio exceeding that of any source, analogue or digital. Dual tape circuits (with independent two-way dubbing and monitoring and external preamp-out/main-in connections make it easy to upgrade your system at any time with an equaliser, surround-sound processor, or electronic crossover.

The sensitive and quiet tuner section of the 7400 is controlled by a rotary tuning knob and 14 presets, combining the natural, intuitive feel of analogue tuning with the precision of digital frequency-synthesis. Automatic station-seek tuning is included on the remote control. FM NR, selectable I.F. bandwidth, and numerous internal refinements provide surprising station-pulling power and satisfying sound under widely varying reception conditions.

PRE-AMP SECTION

Phono input		
Input impedance *(R and C)*	MM	47kΩ / 120pF
	MC	47kΩ / 120pF
Input sensitivity, 1kHz	MM	0.28mV ref. 1W
	MC	0.02mV ref. 1W
Signal/Noise ratio *(A-weighted with cartridge connected)*	MM	76dB ref. 5mV
	MC	76dB ref. 5mV
THD *(20Hz - 20kHz)*		<0.04%
RIAA response accuracy *(20Hz - 20kHz)*		±0.5dB
Line level inputs		
Input impedance *(R and C)*		50kΩ / 250pF
Input sensitivity *(ref. 1W)*		15mV
Maximum input signal		>10V
Signal/Noise ratio *(A-weighted ref 1W)*		96dB
Frequency response *(20Hz - 20kHz)*		±0.3dB
Line level outputs		
Output impedance	Pre-amp	600Ω
	Tape	Source Z + 1kΩ
Maximum output level		>10V
Tone controls		
Treble		±12dB at 3, 6 or 12kHz
Bass		±12dB at 50, 120 or 250Hz
Bass EQ		+3dB at 60Hz
		+6dB at 36Hz
Infrasonic filter *(Switchable)*		-3dB at 12Hz, 12dB / octave

POWER AMP SECTION

Continuous output power into 8Ω *		100W (20dBW)
Rated distortion *(THD 20Hz - 20kHz)*		0.03%
Clipping power *(maximum continuous power per channel)*		130W
IHF Dynamic headroom at 8Ω		+5.7dB
IHF dynamic power *(maximum short term power per channel)*	8Ω	370W (25.7dBW)
	4Ω	400W (26dBW)
	2Ω	440W (26.4dBW)
Damping factor *(ref. 8Ω, 50Hz)*		>100
Input impedance		20kΩ / 600pF
Input sensitivity *(for rated power into 8Ω)*		1V
Frequency response		3Hz - 100kHz +0, -3dB
Signal/noise ratio	ref. 1W	98dB
	ref. rated power	118dB
THD *(20Hz - 20kHz)*		<0.03%
Bridged Mode		
Continuous output power into 8Ω *		200W (23dBW)
IHF Dynamic headroom at 8Ω		+6dB
IHF dynamic power *(maximum short term power per channel)*	8Ω	800W (29dBW)
	4Ω	880W (29.4dBW)

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FM TUNER SECTION		
Input sensitivity	Mono -30dB THD+N	10.3dBf (0.9µV/75Ω)
	Mono 50dB S/N	13dBf (1.2µV/75Ω)
	Stereo 50dB S/N	25dBf (5µV/75Ω)
	Stereo 60dB S/N	35dBf (15µV/75Ω)
Capture ratio *(45 - 65dBf)*		<1.5dB
AM rejection *(45 - 65dBf)*		>65dB
Selectivity, alternate channel		75dB
Selectivity, adjacent channel		7dB
Image rejection		>90dB
I F rejection		>100dB
Harmonic distortion	Mono	0.08%
	Stereo	0.08%
Signal/Noise ratio	Mono	82dB
	Stereo	78dB
Frequency response ±0.5dB		30Hz - 15kHz
Channel separation at 1kHz		50dB
AM TUNER SECTION		
Usable sensitivity		300µV
Selectivity		35dB
Image rejection		50dB
I F rejection		50dB
Signal/Noise ratio		45dB
Harmonic distortion		0.5%
Remote		Yes
NAD Link		No
PHYSICAL SPECIFICATIONS		
Dimensions (W x H x D)		435 x 120 x 390mm
Net weight		11.8kg
Shipping weight		13.6kg
Power consumption *(120 ~ 240V, 50/60Hz)*		390VA

* Minimum power per chnnel, 20Hz - 20kHz, both channels driven with no more than rated distiortion.

Dimensions are of unit's cabinet without attached feet; add up to 18mm for total height.

Dimension depth excludes terminals, sockets, controls and buttons.

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